

WHAT IS CLAIMED IS:

1. An automatic gain control circuit comprising:  
a gain variable amplifier which controls an amplitude of  
a receiving signal based on a control signal;

5 control signal generating means for level-detecting the  
receiving signal and then generating a feedback signal as the  
control signal for the gain variable amplifier; and  
controlling means for deciding at least one of a

10 generation timing of the control signal and a generation period  
of the control signal in response to a predetermined physical  
quantity, and controlling the control signal generating means.

2. An automatic gain control circuit according to  
claim 1, wherein the controlling means includes a look-up table  
15 which uses address information as the predetermined physical  
quantity and holds information of the generation timing of the  
control signal or the generation period of the control signal in  
response to the address information.

20 3. An automatic gain control circuit according to  
claim 1, wherein the controlling means decides the generation  
timing of the control signal or the generation period of the  
control signal using a lapsed time in operation of the automatic  
gain control circuit as the predetermined physical quantity.

4. An automatic gain control circuit according to  
claim 1, wherein the controlling means sets the generation period  
of the control signal shorter than the generation period in a  
steady operation state, for a predetermined rise time from a  
5 non-operated state to the steady operation state when a power  
supply is turned on.

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5. An automatic gain control circuit according to

claim 1, wherein the controlling means sets the generation period  
10 of the control signal shorter than the generation period in a  
steady operation state, for a predetermined rise time from a  
non-operated state to the steady operation state when an  
intermittent receiving operation is carried out.

15 6. An automatic gain control circuit according to  
claim 1, further comprising:

detected output change amount detecting means for  
detecting an amount of change in a detected output of the receiving  
signal;

20 wherein the controlling means decides the generation  
timing of the control signal or the generation period of the  
control signal using an amount of change in the detected output  
as the predetermined physical quantity.

25 7. An automatic gain control circuit according to

claim 1, further comprising:

fading pitch detecting means for detecting a fading pitch of the receiving signal;

wherein the controlling means decides the generation timing of the control signal or the generation period of the control signal using the fading pitch as the predetermined physical quantity.

8. A receiver device comprising:

10 an automatic gain control circuit including: a gain variable amplifier which controls an amplitude of a receiving signal based on a control signal; control signal generating means for level-detecting the receiving signal and then generating a feedback signal as the control signal for the gain variable amplifier; and controlling means for deciding at least one of a generation timing of the control signal and a generation period of the control signal in response to a predetermined physical quantity, and controlling the control signal generating means.

20           9. An automatic gain control method in a receiver  
device including a gain variable amplifier which controls an  
amplitude of a receiving signal based on a control signal, the  
method comprising:

25 a control signal generating step of level-detecting the receiving signal and then generating a feedback signal as the

control signal for the gain variable amplifier; and

a controlling step of deciding a generation timing of the control signal or a generation period of the control signal in response to a predetermined physical quantity.

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10. An automatic gain control method in a receiver device according to claim 9, wherein the controlling step decides the generation timing of the control signal or the generation period of the control signal using a lapsed time in operation of

10 the receiver device as the predetermined physical quantity.

11. An automatic gain control method in a receiver device according to claim 9, wherein the controlling step sets the generation period of the control signal shorter than the

15 generation period in a steady operation state, for a predetermined rise time from a non-operated state to the steady operation state when a power supply is turned on.

12. An automatic gain control method in a receiver device according to claim 9, wherein the controlling step sets the generation period of the control signal shorter than the

20 generation period in a steady operation state, for a predetermined rise time from a non-operated state to the steady operation state when an intermittent receiving operation is carried out.

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13. An automatic gain control method in a receiver device according to claim 9, further comprising:

5 a detected output change amount detecting step of detecting an amount of change in a detected output of the receiving signal;

10 wherein the controlling step decides the generation timing of the control signal or the generation period of the control signal using an amount of change in the detected output as the predetermined physical quantity.

14. An automatic gain control method in a receiver device according to claim 9, further comprising:

15 a fading pitch detecting step of detecting a fading pitch of the receiving signal;

20 wherein the controlling step decides the generation timing of the control signal or the generation period of the control signal using the fading pitch as the predetermined physical quantity.

25 15. A computer-readable recording medium for recording the automatic gain control method for the receiver device as a program to be executed by a computer, said method comprising:

25 a control signal generating step of level-detecting the receiving signal and then generating a feedback signal as the control signal for the gain variable amplifier; and

a controlling step of deciding a generation timing of the control signal or a generation period of the control signal in response to a predetermined physical quantity.

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